

Pankaj Nariya is presenting



# Shri Manibhai Virani & Smt. Navalben Virani Science College

Department of Chemistry

10<sup>th</sup> Board of Study Meeting

18<sup>th</sup> December, 2021



Pankaj Nariya



Satish Tala



You

10:16 AM | Meeting of the Board of Studies-Che...



Pankaj Nariya is presenting

10<sup>th</sup> MEETING OF BOARD OF STUDIES

Date: 18/12/2021      Mode: hybrid-online/offline mode      Time: 10:30 AM

AGENDA

1. Confirmation of MoM of previous BoS held on 30/06/2021
2. Scheme of Learning and Evaluation for 2nd Sem. of B.Sc. Chemistry program
3. Syllabi of all theory & practical courses of Sem.-II of B.Sc. Chemistry program
4. Syllabi & evaluation norms of Part-III : Value Added Course/s (VAC) offered by the department
5. Question paper pattern for all theory & practical courses of Sem.-II of B.Sc. Chemistry program
6. List of paper setters and examiners for all theory & practical courses of B.Sc. Chemistry



Satish Tala



Kiritkumar M Raj...



KM Pharma Sup...



Mahesh Savant



Yvonne Fernand...



Principal Shree ...



You

10:34 AM | Meeting of the Board of Studies-Che...

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https://meet.google.com/yeq-byнк-dyz?authuser=0

Dimensions | Common Reagents in ... | Stereo Download | Videos - American Ch... | Microwave Chemistry... | Internet | Other Bookmarks

**REC** Pankaj Nariya is presenting

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**People**

Mute all    Add people    Host controls

11 | Call

- Dr. Pratik A. A... (You) Meeting host
- Kiritkumar M Rajkotia
- KM Pharma Support
- Mahesh Savant
- Pankaj Nariya
- Pankaj Nariya Presentation
- Principal Shree M & ...
- Satish Tala
- Yvonne Fernandes

Pankaj Nariya    Satish Tala    Kiritkumar M R...    KM Pharma Su...    3 others    You

10:35 AM | Meeting of the Board of Studies-Che...    [Mute] [Unmute] [Chat] [Hand] [Share] [More] [End] [Call]

10:35 18-12-2021

**REC** Pankaj Nariya is presenting

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Pankaj Nariya    Satish Tala    Kiritkumar M Raj...    KM Pharma Sup...    Mahesh Savant    Yvonne Fernand...    2 others    You

10:36 AM | Meeting of the Board of Studies-Che...    [Mute] [Unmute] [Chat] [Hand] [Share] [More] [End] [Call]

10:36 AM 12/18/2021

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Annexure Scheme of Learning and Evaluation.docx - Microsoft Word

**B.Sc. Chemistry**  
**SCHEME OF LEARNING AND EVALUATION**  
 For the students admitted from A.Y. 2021-2022 & onwards

**Semester II**

Course Code	Course	Contact Hrs/Week			SEE Duration (Hours)	Maximum Marks			Credits
		T	Tu	P		CLA	SEE	Total	
<b>Part-I: Language course</b>									
21ULCEN201	Functional English	3	-	-	3	40	60	100	3
<b>Part-I Total</b>		<b>3</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>40</b>	<b>60</b>	<b>100</b>	<b>3</b>
<b>Part-II: Discipline Specific Courses</b>									
21UCHCC201	<b>Core 3: Conceptual Inorganic and Analytical Chemistry (F)</b>	4	-	-	3	30	70	100	4
21UCHCC202	<b>Core 4: Conceptual Organic and Physical Chemistry (F)</b>	4	-	-	3	30	70	100	4
21UCHID201	<b>IDC 2: Physics: Solid State Electronics and Nuclear Physics</b>	3	-	-	3	30	70	100	3
21UCHCC203	<b>Core Practical 2: Combined Practical</b>	-	-	12	6	40	60	100	4
21UCHID202	<b>IDC Practical 2: Physics: Solid State Electronics and Nuclear Physics</b>	-	-	6	3	40	60	100	3
	<b>Core Enrichment Course Component 1: Concept to Practice</b>	-	1	-	-	(20)	Evaluation at the end of 4th Semester		-

10:41 AM | Meeting of the Board of Studies-Che...

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**Semester II**

Course Code	Course	Contact Hrs/Week			SEE Duration (Hours)	CIA	SEE	Total	Credits
		T	Tu	P					
<b>Part-I: Language course</b>									
21ULCEN201	Functional English	3	-	-	3	40	60	100	3
<b>Part-I Total</b>		<b>3</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>40</b>	<b>60</b>	<b>100</b>	<b>3</b>
<b>Part-II: Discipline Specific Courses</b>									
21UCHCC201	<b>Core 3: Conceptual Inorganic and Analytical Chemistry (F)</b>	4	-	-	3	30	70	100	4
21UCHCC202	<b>Core 4: Conceptual Organic and Physical Chemistry (F)</b>	4	-	-	3	30	70	100	4
21UCHID201	<b>IDC 2: Physics: Electronics and radiation Physics</b>	3	-	-	3	30	70	100	3
21UCHCC203	<b>Core Practical 2: Combined Practical</b>	-	-	12	6	40	60	100	4
21UCHID202	<b>IDC Practical 2: Physics: Solid State Electronics and Nuclear Physics</b>	-	-	6	3	40	60	100	3
	<b>Core Enrichment Course Component 1: Concept to Practice</b>	-	1	-	-	(20)	Evaluation at the end of 4th Semester		-
<b>Part II Total</b>		<b>11</b>	<b>1</b>	<b>18</b>		<b>170</b>	<b>330</b>	<b>500</b>	<b>18</b>
<b>Part-III: Ability Enhancement Courses</b>									
21AEES201	<b>AECC II: Environmental Conservation and Sustainable Development</b>	1	-	-	-	Remarks			2
21AEVE202	<b>AECC III: Human Values for Holistic Living</b>	1	2*	-	-	Remarks			3

10:44 AM | Meeting of the Board of Studies-Che...



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Course Content	Hours
<b>Unit 1: Transition and Inner-transition elements</b> <b>Elements of the First Transition Series</b> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Reversal of energies of 3d and 4s orbital</li> <li>• Metallic properties</li> <li>• Catalytic properties</li> <li>• Magnetic &amp; Spectral properties</li> <li>• Tendency of Formation of Alloys</li> </ul> <b>Lanthanoids and Actinoids elements</b> <ul style="list-style-type: none"> <li>• Electronic configuration</li> <li>• Oxidation states</li> <li>• Color &amp; Magnetic properties</li> <li>• Lanthanide contraction</li> <li>• Separation of lanthanides (ion exchange method only)</li> <li>• Applications</li> </ul>	10 hrs

10:49 AM 12/18/2021

Pankaj Nariya Satish Tala Kiritkumar M Raj... KM Pharma Sup... Mahesh Savant Yvonne Fernand... Principal Shree ... You

10:49 AM | Meeting of the Board of Studies-Che... [Microphone] [Camera] [Screen] [Hand] [Share] [More] [End]

REC P Pankaj Nariya is presenting

- Douglas A. Skoog, West, Holler, Crouch (2004, 8<sup>th</sup> edition) *Fundamental of Analytical Chemistry*. Mexico: Thomson-Brooks/Cole (ISBN: 81-315-0051-9).
- Sharma, B. K. (2014) *Instrumental Method of Chemical Analysis*. Meerut: GOEL publishing House (ISBN: 978-81-8283-099-8).
- Christian, Gary D.; Dasgupta, Purnendu K.; S. Chug, Kevin A. (2007, 6<sup>th</sup> edition) *Analytical Chemistry*. Hoboken: Wiley-Blackwell Science Ltd. (ISBN: 978-81-265-1113-6).

**Methods of Assessment & Tools:**  
Components of CIA: 30 marks

Sr. No.	Component	Content	Duration (if any)	Marks	Sub Total
A	Test 1	1 <sup>st</sup> 2 units	1 <sup>1/2</sup> hours	5 (Set for 30)	20
	Test 2	All 5 units	3 hours	15 (Set for 70)	
B	Assignment			05	10
C	Class activity			05	
Grand Total					30

Assignment

- Abstract and executive summary
- Case study writing
- Concept mapping
- Student presented handbook

10:52 AM 12/18/2021

Pankaj Nariya Satish Tala Kiritkumar M Raj... KM Pharma Sup... Mahesh Savant Yvonne Fernand... Principal Shree ... You

10:52 AM | Meeting of the Board of Studies-Che... [Microphone] [Camera] [Screen] [Hand] [Share] [More] [End]

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3.Annaure-2-Syllab Sem II.docx - Microsoft Word

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	Test 2	All 5 units	3 hours	15 (Set for 70)	
B	Assignment			05	10
C	Class activity			05	
Grand Total					30

Assignment

- Abstract and executive summary
- Case study writing
- Concept mapping
- Student presented handbook

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Pankaj Nariya Satish Tala Kiritkumar M Raj... KM Pharma Sup... Mahesh Savant Yvonne Fernand... Principal Shree ... You

10:52 AM | Meeting of the Board of Studies-Che...

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3.Annaure-2-Syllab Sem II.docx - Microsoft Word

Department: Chemistry Programme: B.Sc. Chemistry

**Discipline Specific Course**  
For the students admitted from A.Y. 2021-2022 & onwards

Offering Department: Chemistry	Offered to: B.Sc. Chemistry	
Semester - II		
Course Code 21UCHCC202	Course Title Core 4: Conceptual Organic and Physical Chemistry (F) I	Course Credit and Hours 4 Credits - 4 hrs/wk

**Course Description:**  
This course provides a systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of hydrocarbons, alkyl halides, alcohols and ethers. It also covers the ideas of chemical equilibrium chemical kinetics, methods of preparation of colloidal state and its application. The course aims to address SDG No-4: Quality education.

**Course Purpose:**  
This course aims to provide basic understanding of various functional groups. This is planned in such a way that students will be able to learn methods for preparation of alkyl and aryl halide, alkenes, dienes, alcohol, phenol and ether. Students will be able to know the different effects like Tindal effect, Brownian movement and properties of colloidal state. It also covers the basic concept of chemical equilibrium and reaction rates, rate laws and transition states.

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10:56 AM | Meeting of the Board of Studies-Che...

Re-Accredited at 'A' Level by NAAC  
STAR college Scheme & Status by MST-DBT  
UGC-College with Potential for Excellence (CPE)  
UGC-DDU KAUSHAL Kendra  
GAAA –Grade A-1 by KCG, Government of Gujarat  
GPCB-Government of Gujarat approved Environment Audit Center  
Nodal Center for capacity building by GSBTM

**Department of Chemistry**  
**B.Sc. Chemistry**  
**Value Added Course (VAC)**

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Students across the University **including** the offering department. (The course should not be a part of regular curriculum of the offering department.)

**Semester : II –V (3 year programs) / VII (4 year programs)**

Course Code	Course Title	Course Credit and Hours
	<b>Formulation of Detergents &amp; Toiletries</b>	<b>1 Credit - 4 hrs / wk</b>

I

**Objective of the course:**

1. Student should be able to understand the basic concept of surface active agents.
2. Understand the basic theory and role of additives in the formulation of cleansing agents and their role in day to day life of humans
3. Students will be able to develop the raw materials and formulation of the soap.
4. Students will be able to develop the raw materials and formulation of the detergents.
5. Student should be able to understand the basic concept of toiletries and their formulation with vast applications.

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chemistry, focusing primarily on the basic principles to understand the fertility and reactivity of soil. The course also provides understanding of important soil, physical and chemical properties of water quality.

Course Content	Hours
<b>Module-I: Water Analysis– Physical examination</b> pH, temperature, total dissolved solid, suspended solid, acidity, alkalinity, colour, taste, smell, turbidity, hardness of water.	3 hrs
<b>Module-II: Water Analysis– Nonmetallic inorganic constituents</b> chloride, sulphate, Sulphide, fluoride, phosphate, Sulphur, nitrate, nitrite, carbon dioxide, ammonia, cyanide.	3hrs
<b>Module-III: Water Analysis– Mineral and Toxic Ions</b> Mineral ions: calcium, magnesium, iron, sodium, silver, zinc, manganese. Toxic ions: lead, mercury, arsenic, beryllium, cadmium, chromium, copper, selenium.	3hrs
<b>Module-IV : Soil Analysis-Physical Test</b>	3hrs

11:21 AM 12/18/2021

Pankaj Nariya Satish Tala Remove KM Pharma Support from the call. Fernand... Kiritkumar M Raj... Mahesh Savant Principal Shree ... You

11:21 AM | Meeting of the Board of Studies-Chem...

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Shri Manibhai Virani and Smt. Navalben Virani Science College (Autonomous), Rajkot  
Affiliated to Saurashtra University, Rajkot

**Question Paper Pattern for Semester End Examination  
UG & PG Programs**

Duration of Examination:3 Hrs. Max. Marks:70

**Part A (10 Questions x 1 Mark = 10 Marks)**  
Answer ALL questions (2 questions from each unit)

1.  
↓  
10.

**Part B (5 Questions X5 Marks = 25 Marks)**  
Answer ALL questions (1 question with internal choice from each unit)

11:25 AM 12/18/2021

Pankaj Nariya Satish Tala KM Pharma Sup... Yvonne Fernand... Kiritkumar M Raj... Mahesh Savant Principal Shree ... You

11:25 AM | Meeting of the Board of Studies-Chem...



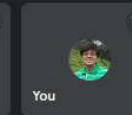
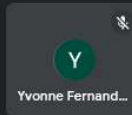
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Rajkot**  
Affiliated to Saurashtra University, Rajkot

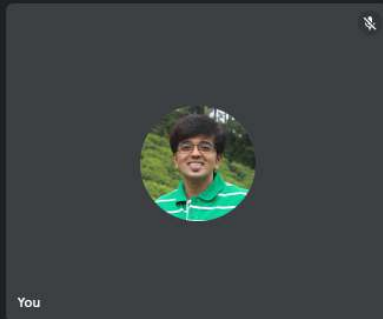
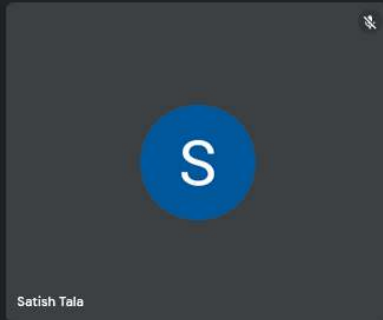
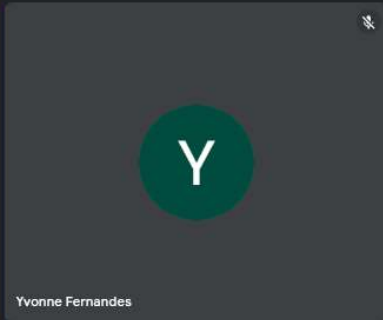
Question Paper Blueprint

A. SEE Fundamental Paper – 70 Mark

Sr No	Types of Question (K level)	Short Question (1 Marks)	Value Question Answer (5 Marks)	Descriptive Question (7 Marks)	Total Marks	% Weightage
1	Remembering-Knowledge based (Define, Arrange, Describe, Identify, List, Match, order, select, Name, Tell, Show, Label, Collect, Recall, Examine, Repeat, Tabulate, Quote, Duplicate, Relate, Memorize, Recognize, Reproduce, or State)	4	2	2	28	40
2	Understanding					



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KM Pharma Support has left the meeting

11:34 AM | Meeting of the Board of Studies-Che...





REC

Pankaj Naraya

Yvonne Fernandes

Satish Tala

Mahesh Savant

Principal Shree M & N Virani Science College

Yvonne Fernandes

You

Yvonne Fernandes (outside M. & N. Virani Science College, Rajkot) joined

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REC

Pankaj Naraya

Satish Tala

Mahesh Savant

Principal Shree M & N Virani Science College

Yvonne Fernandes

You

11:35 AM | Meeting of the Board of Studies-Che...



REC



Pankaj Nariya



Satish Tala



Mahesh Savant



Principal Shree M & N Virani Science College



Yvonne Fernandes



You

11:38 AM | Meeting of the Board of Studies-Che...

